

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for manufacturing a curved tempered glass sheet, ~~manufacturing method~~ comprising the steps of:

heating a glass sheet ~~to near its softening temperature~~ in a furnace to near a softening temperature of the glass sheet;

bending the heated glass sheet to a predetermined shape to provide a bent glass sheet; and

changing ~~the~~ a curved shape of the bent glass sheet by:

restraining a shape of, ~~while the bent glass sheet is restrained in~~
~~shape by a pair of~~ with a plurality of upper curved support rollers and a plurality of lower curved support rollers while conveying the bent glass sheet
~~and conveyed~~ in a substantially horizontal direction; and,

while restraining and conveying the bent glass sheet, quenching the bent glass sheet by applying ~~with~~ different cooling powers ~~being applied to~~ upper and lower surfaces thereof.

2. (Currently Amended) The method A curved tempered glass sheet
~~manufacturing method~~ according to claim 1, wherein each of the upper and lower

curved support rollers comprises plural large-diameter, segmented rollers provided on a curved core support roller shaft, and the an outer surface of each of the large-diameter rollers is covered with a heat-resistant material.

3. (Currently Amended) ~~The A-curved tempered glass sheet manufacturing~~ method according to claim 1, wherein changing the shape of the bent glass sheet includes the steps of:

blowing air at the shape of the bent glass sheet is changed by air of a first pressure against the upper surface of the bent glass sheet; and,

blowing air at a second pressure against the lower surface ~~different pressures~~ ~~blown to the upper and lower surfaces of the bent glass sheet.~~

4. (Currently Amended) ~~The A-curved tempered glass sheet manufacturing~~ method according to claim 1, wherein the step of bending the glass sheet to a predetermined shape includes the steps of:

providing a bending mold above the glass sheet and a heat-resistant belt between the bending mold and the glass sheet so that, during its conveyance of the glass sheet, the glass sheet is bent into the predetermined shape by pressing the glass sheet ~~it~~ together with the belt against the bending mold.

5. (Currently Amended) ~~A-The curved tempered glass sheet manufacturing~~ method according to claim 1, comprising the further steps of:

providing wherein when a gap T1 of at an upstream part of between the upper and lower curved support rollers, said gap T1 being equal to $t+\alpha 1$, wherein $\alpha 1$

~~is given as $(t+\alpha_1)$, obtained by adding a~~ is a first clearance α_1 and t is to the a
thickness of the glass sheet thickness; and,

~~providing a t , and a gap T_2 of at a downstream part~~ between the upper and
lower curved support rollers, said gap T_2 being equal to $t+\alpha_2$, wherein α_2 is a
second clearance;

~~wherein is given as $(t+\alpha_2)$, obtained by adding a second clearance α_2 to a~~
~~glass sheet thickness t , α_1 is smaller than α_2 .~~

6. (Currently Amended) ~~A~~ The curved tempered glass sheet manufacturing
method according to claim 5, wherein the first clearance α_1 is greater than or equal
to 0 mm and is less than or equal to $0\text{ mm} \leq \alpha_1 \leq 3\text{ mm}$.

7. (Currently Amended) A curved tempered glass sheet manufacturing
apparatus, comprising:

a furnace for heating a glass sheet to near ~~its~~ a softening temperature of the
glass sheet;

a preliminary bending apparatus for bending the heated glass sheet heated
~~in the furnace to a predetermined shape; and~~

a quenching/secondary bending apparatus for changing ~~the a~~ curved shape
of the bent glass sheet, said quenching/secondary bending apparatus having upper
and lower curved support rollers adapted to restrain a shape of ~~by, while the bent~~
~~glass sheet bent by the preliminary bending apparatus is restrained in shape by~~
~~upper and lower curved support rollers~~ while the bent glass sheet is and conveyed
in a substantially horizontal direction, said quenching/secondary bending apparatus

serving to quench the restrained ~~quenching the bent glass sheet by applying with~~
different cooling powers ~~being applied to upper and lower surfaces thereof.~~

8. (Currently Amended) A ~~The curved tempered glass sheet manufacturing~~
apparatus according to claim 7, wherein the quenching/secondary bending
apparatus includes ~~has quenching means for~~ blowing air at a first pressure against
the upper side of the bent glass sheet and for blowing air at a second pressure
against the lower side ~~changing the shape of the bent glass sheet by air of different~~
~~pressures blown to upper and lower sides of the bent glass sheet so as to change a~~
shape of the bent glass sheet.

9. (Currently Amended) A ~~The curved tempered glass sheet manufacturing~~
apparatus according to claim 7, further comprising means for adjusting a space
between the upper and lower curved support rollers, whereby:

~~gap adjusting means which, when a gap T1 of an upstream part of between~~
the upper and lower curved support rollers is equal to $t + \alpha_1$, wherein α_1 is a first
clearance and t is a thickness of the glass sheet, set to be $(t + \alpha_1)$, obtained by
~~adding a first clearance α_1 to a glass sheet thickness t , and a gap T2 of a~~
downstream part is ~~set to be $(t + \alpha_2)$, obtained by adding a second clearance α_2 to a~~
~~glass sheet thickness t , equal to $t + \alpha_2$, wherein α_2 is a second clearance, said~~
space adjusting means permitting ~~allows for adjustment of the upper and lower~~
curved support rollers such that α_1 becomes is smaller than α_2 .